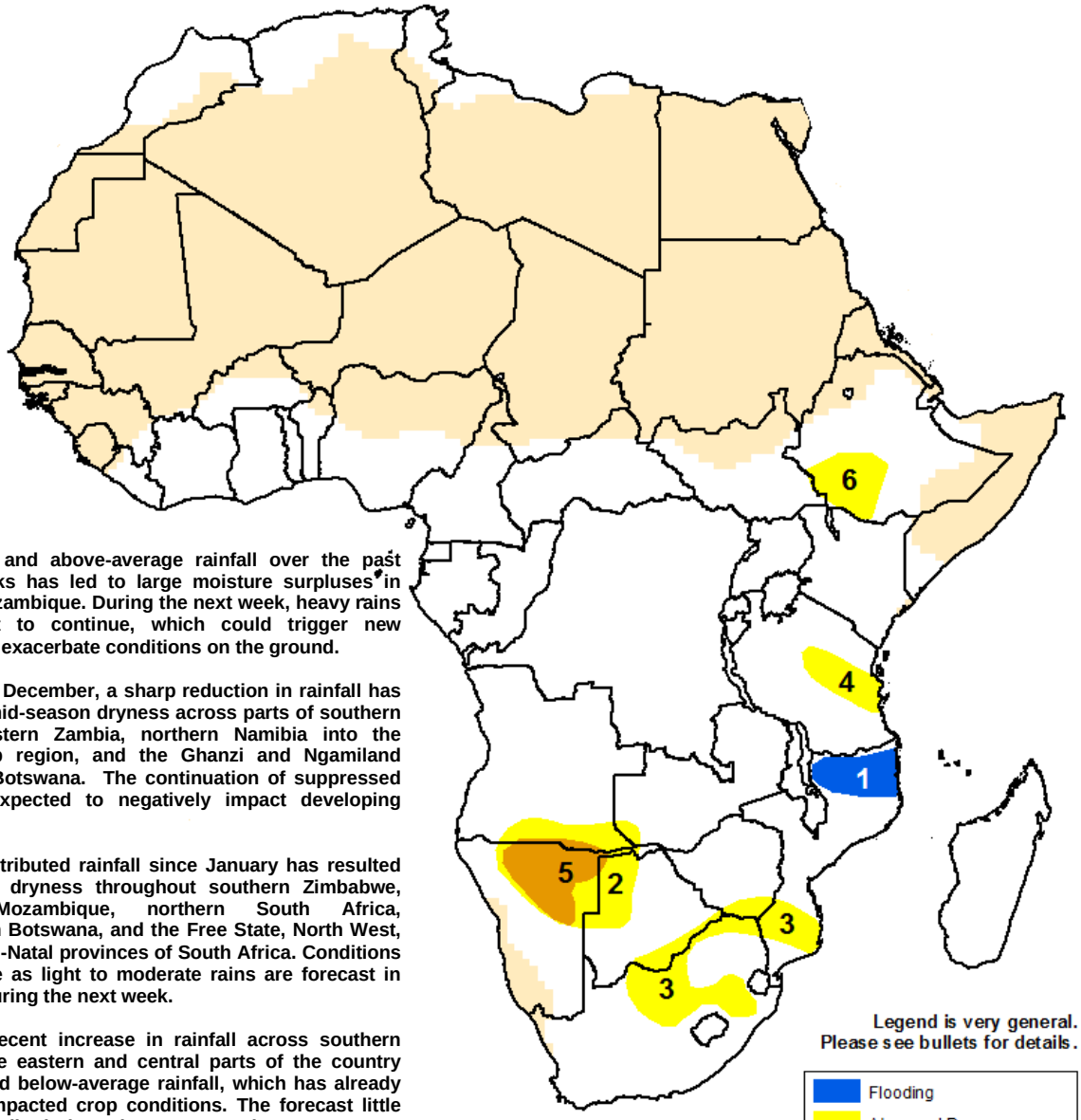
Climate Prediction Center's Africa Hazards Outlook
March 12 – March 18, 2015

- **Suppressed rains expected in Southern Africa during the next week.**
- **Dry weather observed over the Greater Horn of Africa.**



1) Frequent and above-average rainfall over the past several weeks has led to large moisture surpluses in northern Mozambique. During the next week, heavy rains are forecast to continue, which could trigger new flooding and exacerbate conditions on the ground.

2) Since late December, a sharp reduction in rainfall has resulted in mid-season dryness across parts of southern Angola, western Zambia, northern Namibia into the Caprivi Strip region, and the Ghanzi and Ngamiland districts of Botswana. The continuation of suppressed rainfall is expected to negatively impact developing crops.

3) Poorly-distributed rainfall since January has resulted in abnormal dryness throughout southern Zimbabwe, southern Mozambique, northern South Africa, southeastern Botswana, and the Free State, North West, and KwaZulu-Natal provinces of South Africa. Conditions may improve as light to moderate rains are forecast in the region during the next week.

4) Despite recent increase in rainfall across southern Tanzania, the eastern and central parts of the country have received below-average rainfall, which has already negatively impacted crop conditions. The forecast little to no rainfall during the next week may worsen conditions on the ground.

5) Extended dry spells since January have led to large rainfall deficits in northeastern Namibia. The continued below-average rain has degraded vegetation conditions further. With the rainy season approaching to an end, recovery is unlikely.

6) Below-average rainfall since February has resulted in increasing rainfall deficits in southwestern Ethiopia. Dry weather is expected to continue during the next week, which is likely to increase moisture deficits in the region.

Drier than average conditions observed in southwestern Africa.

During the past week, a slight increase in rainfall was observed across the western portions of Southern Africa, particularly, southwestern Angola and western Namibia. Light to moderate rains fell over these areas, while suppressed to light rains were observed elsewhere. In contrast, heavy downpours fell along the coastal areas of northern Mozambique, southern Tanzania, and Madagascar (**Figure 1**). This past week's large rainfall amounts have exacerbated ground conditions over many already-saturated local areas of Madagascar. Farther north, heavy rains and strong winds have also been reported to cause many fatalities and flooding in northwestern Tanzania, according to media. Compared to climatology, this past week's rainfall was above-average over southwestern Angola, northwestern Namibia, northern Mozambique, and Madagascar, but slightly below-average over much of Angola, Zambia, southern Zimbabwe, southern Mozambique, and east-central South Africa. The uneven spatial distribution of rainfall over the past several weeks has resulted in a dipole pattern in rainfall anomalies, with wetter than average conditions in eastern Southern Africa, including southern Tanzania, northern Mozambique, and Madagascar and drier than average conditions across its western counterparts, including Angola, Namibia, parts of Botswana, and South Africa.

An analysis of rainfall percentile over the past ninety days has indicated very low (< 10th) percentile rankings in southern Angola, northeastern Namibia, and localized areas of South Africa (**Figure 2**). Cumulative rainfall since early December to date has been among the lowest in records. Large rainfall deficits ranging between 100-300 mm have resulted mostly from extended dry spells and poor rains since January. Recent vegetation indices such as the Normalized Difference Vegetation Index anomaly have also shown further deterioration of biomass conditions over Namibia and parts of Botswana and South Africa. With the Southern African monsoon coming to an end, the likelihood for recovery is low. During the next week, suppressed rains are forecast over a wide swath of Southern Africa from southern Angola, northern Namibia to the west to central and southern Mozambique to the east. However, heavy rains are expected in northern Mozambique, which increase the risks for flooding.

Rainfall deficits increase over Eastern Africa.

During the past week, light to locally moderate rains fell in western Ethiopia, but suppressed rains were observed elsewhere. Typically, southwestern and central Ethiopia receive light rains, announcing the onset of the March-May season during this time of the year. In Ethiopia, the lack of rainfall since the beginning of February has led to increasing moisture deficits across the southwest and crop-producing areas of the east-central parts of the country (**Figure 3**). The onset of the rainy season is needed to ensure adequate soil moisture for agricultural and pastoral activities in the region. For next week, dry weather is forecast throughout the Greater Horn of Africa, which could negatively impact land preparation for the current growing cycle.

Satellite Estimated Rainfall (mm)
Valid: March 04 – March 10, 2015

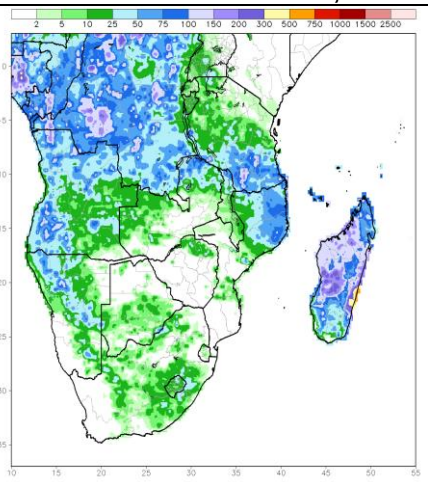


Figure 1: NOAA/CPC

Satellite-Estimated Rainfall Percentile
Valid: December 11, 2014 – March 10, 2015

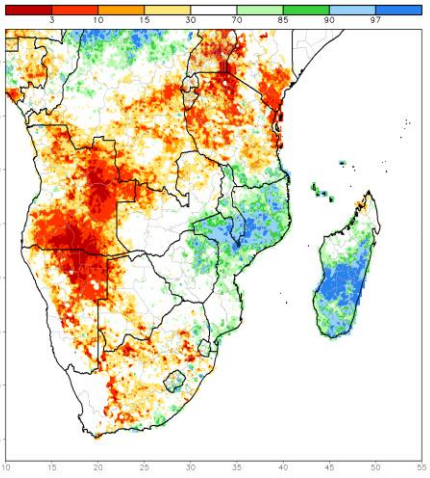


Figure 2: NOAA/CPC

Satellite Estimated Rainfall Anomaly (mm)
Valid: February 01 – March 10, 2015

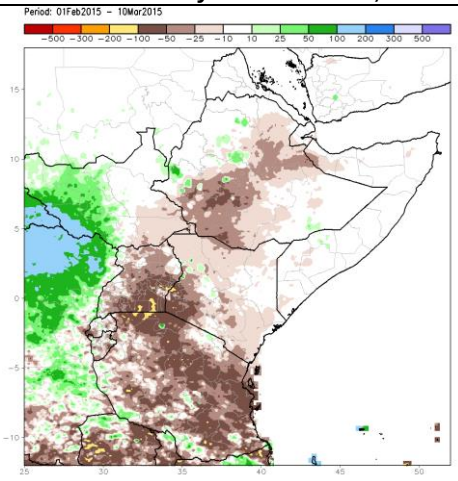


Figure 3: NOAA/CPC

Note: The hazards outlook map on page 1 is based on current weather/climate information and short and medium range weather forecasts (up to 1 week). It assesses their potential impact on crop and pasture conditions. Shaded polygons are added in areas where anomalous conditions have been observed. The boundaries of these polygons are only approximate at this continental scale. This product does not reflect long range seasonal climate forecasts or indicate current or projected food security conditions.

Questions or comments about this product may be directed to Wassila.Thiaw@noaa.gov or 1-301-683-3424.